Claim Amendments:

1.　　(Cancelled)

2.　　(Currently Amended) ~~The method of claim 1,~~ A computer controlled method of analyzing a network, wherein the network has a plurality of network segments, the method comprising:

identifying segment addresses of virtual private network segments in the network, wherein pairs of segment addresses define individual virtual private network segments;

obtaining statistical data associated with each identified segment address in the network, the statistical data representing more than one type of statistic obtained from each identified segment address; and

analyzing the obtained statistical data to identify similar statistical data corresponding to the pairs of segment addresses wherein the step of analyzing the obtained statistical data further comprises the steps of:

identifying potential pairs of segment addresses;

obtaining refined statistical data associated with the identified potential pairs of segment addresses; and

confirming that the potential pairs of segment addresses are the pairs of segment addresses based on the obtained refined statistical data.

3.　　(Currently Amended) The method of claim ~~1~~2, further comprising the step of storing the pairs of segment addresses in a database.

4.　　(Currently Amended) The method of claim ~~1~~2, wherein the step of obtaining statistical data associated with each identified segment address in the network, further comprises the step of creating a statistical fingerprint for each identified segment address.

5.　　(Original) The method of claim 4, wherein each statistical fingerprint comprises inverse pairs of statistics.

6.　　(Original) The method of claim 4, wherein the step of creating statistical fingerprints further comprises the step of aggregating a predetermined set of core statistics.

7.　　(Original) The method of claim 6, wherein the core statistics comprises at least one of number of bytes sent/received and number of send/receive errors.

8.　　(Currently Amended) The method of claim ~~1~~2, wherein the statistical data comprises at least one of number of bytes sent/received and number of send/receive errors.

9.　　(Currently Amended) The method of claim ~~1~~2, wherein the step of obtaining statistical data associated with each identified segment address further comprising the step of polling network devices containing segment addresses during a predetermined interval.

10.　　(Original) The method of claim 9, wherein each network device comprises a router.

11.　　(Original) The method of claim 9, wherein each segment address comprises a data link circuit identifier.

12.　　(Currently Amended) The method of claim ~~1~~2, wherein each segment address comprises a data link circuit identifier.

13.   (Currently Amended) A computer-readable medium having computer-executable instructions for performing the steps recited in claim ~~1~~2.

14.   (Cancelled)

15.   (Currently Amended) ~~The method of claim 14 further comprising the steps of:~~A computer controlled method of analyzing a network, wherein the network has a plurality of network segments, the method comprising:

 receiving segment addresses of selected network segments in the network, wherein each segment includes at least a portion spanning a public switched network and wherein each selected network segment is defined by pairs of segment addresses;

 obtaining statistical data associated with each identified segment address in the network, the statistical data representing different types of statistics;

 analyzing the obtained statistical data to identify similar statistical data;

 identifying the pairs of segment addresses corresponding to the selected network segments, based on the identified similar statistical data;

 obtaining refined statistical data associated with the identified pairs of segment addresses; ~~and~~

 confirming that the pairs of segment addresses are the pairs of segment addresses based on the obtained refined statistical data; and

 storing the pairs of segment addresses in a database.

16-38. (Cancelled)

39.   (New) A computer system for analyzing a network, wherein the network has a plurality of network segments, comprising:

 a component for identifying segment addresses of virtual private network segments in the network, wherein pairs of segment addresses define individual virtual private network segments;

a component for obtaining statistical data associated with each identified segment
address in the network, the statistical data representing more than one type
of statistic obtained from each identified segment address; and

a component for analyzing the obtained statistical data to identify similar statistical
data corresponding to the pairs of segment addresses, the analyzing
including:

identifying potential pairs of segment addresses;

obtaining refined statistical data associated with the identified potential pairs
of segment addresses; and

confirming that the potential pairs of segment addresses are the pairs of
segment addresses based on the obtained refined statistical data.

40.   (New) The computer system of claim 39 further comprising a component for
storing the pairs of segment addresses in a database.

41.   (New) The computer system of claim 39 wherein the obtaining statistical
data associated with each identified segment address in the network, further comprises
creating a statistical fingerprint for each identified segment address.

42.   (New) The computer system of claim 41, wherein each statistical fingerprint
comprises inverse pairs of statistics.

43.   (New) The computer system of claim 41, wherein the creating of statistical
fingerprints further comprises aggregating a predetermined set of core statistics.

44.   (New) The computer system of claim 43, wherein the core statistics
comprises at least one of number of bytes sent/received and number of send/receive
errors.

45.   (New) The computer system of claim 39, wherein the statistical data comprises at least one of number of bytes sent/received and number of send/receive errors.

46.   (New) The computer system of claim 39, wherein the obtaining of statistical data associated with each identified segment address further comprising polling network devices containing segment addresses during a predetermined interval.

47.   (New) The computer system of claim 46, wherein each network device comprises a router.

48.   (New) The computer system of claim 46, wherein each segment address comprises a data link circuit identifier.

49.   (New) The computer system of claim 39, wherein each segment address comprises a data link circuit identifier.